

IN THE CLAIMS:

1. (Amended) A ~~nucleic acid delivery vehicle~~ recombinant adenovirus having at least a an improved tissue tropism for fibroblast-like or macrophage-like cells associated with a synovial cavity, said recombinant adenovirus comprising:
at least one protein of an adenovirus of subgroup C origin associated with the recombinant adenovirus's capsid; and
at least a knob domain of a fiber protein of adenovirus 16 associated with the recombinant adenovirus's capsid, so as to provide the improved tissue tropism for fibroblast-like or macrophage-like cells.

2. Canceled.

3. (Amended) The ~~vehicle~~ recombinant adenovirus of claim 1, wherein said ~~vehicle~~ has at least in part been deprived of at least a tissue tropism for liver cells. subgroup C adenovirus is adenovirus 5.

4-17. Canceled.

18. (Twice Amended) The ~~vehicle~~ recombinant adenovirus of claim 1, further comprising at least one nucleic acid of interest incorporated into the recombinant adenovirus's nucleic acid.

19. Canceled.

20. (Amended) ~~The vehicle of claim 19, wherein said nucleic acid further comprises~~ A recombinant adenovirus having an improved tissue tropism for fibroblast-like or macrophage-like cells associated with a synovial cavity, said recombinant adenovirus comprising:
at least one protein of an adenovirus of subgroup B adenovirus C origin associated with the recombinant adenovirus's capsid;
at least a knob domain of a fiber protein of adenovirus associated with the recombinant adenovirus's capsid, so as to provide the improved tissue tropism for fibroblast-like or macrophage-like cells;
at least one nucleic acid of interest incorporated into the recombinant adenovirus's nucleic acid;
and
a subgroup B adenoviral nucleic acid incorporated into the recombinant adenovirus's nucleic acid.

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21. Canceled.

22. (Twice Amended) ~~The vehicle of claim 19,~~ A recombinant adenovirus having an improved tissue tropism for fibroblast-like or macrophage-like cells associated with a synovial cavity, said recombinant adenovirus comprising:
at least one protein of an adenovirus of subgroup C origin associated with the recombinant adenovirus's capsid;
at least a knob domain of a fiber protein of adenovirus 16 associated with the recombinant adenovirus's capsid, so as to provide the improved tissue tropism for fibroblast-like or macrophage-like cells;
at least one nucleic acid of interest incorporated into the recombinant adenovirus's nucleic acid;
and
~~wherein said~~ a subgroup B adenovirus adenoviral nucleic acid incorporated into the recombinant adenovirus's nucleic acid, wherein the subgroup B adenoviral nucleic acid encodes the knob domain of the fiber protein of is adenovirus 16.

23-26. Canceled

27. (Amended) A method of delivering a nucleic acid of interest to fibroblast-like or macrophage-like cells associated with a synovial cavity, said method comprising: introducing ~~the vehicle~~ a recombinant adenovirus having a tissue tropism for fibroblast-like or macrophage-like cells associated with a synovial cavity of claim 1 to into said the synovial cavity; wherein the recombinant adenovirus's capsid has at least one protein of an adenovirus of subgroup C origin and at least a knob domain of a fiber protein of adenovirus 16 associated therewith; and allowing the recombinant adenovirus to infect the fibroblast-like or macrophage-like cells associated with the synovial cavity.

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28-46. Canceled

Please add the following new claims:

47. (New) The recombinant adenovirus of claim 1, further comprising: an adenoviral nucleic acid incorporated into the recombinant adenovirus, wherein the adenoviral nucleic acid is modified such that the capacity of the adenoviral nucleic acid to replicate in a target cell has been reduced or disabled through a deletion of at least part of the adenoviral E-1 region.

48. (New) The recombinant adenovirus of claim 3, wherein the at least one protein originating from adenovirus 5 is a non-fiber capsid protein, such that the recombinant adenovirus has a reduced tissue tropism for liver cells.

49. (New) A method for producing a recombinant adenovirus having a tissue tropism for fibroblast-like or macrophage-like cells associated with a synovial cavity, said method comprising:
providing a cell with a means for the assembly of the recombinant adenovirus; and
wherein the means includes a nucleic acid encoding at least a knob domain of a fiber protein of adenovirus serotype 16.

50. (New) A cell for producing a recombinant adenovirus having a tissue tropism for fibroblast-like or macrophage-like cells associated with a synovial cavity, said cell comprising:
a means for the assembly of the recombinant adenovirus; and
wherein the means includes a nucleic acid encoding at least a knob domain of a fiber protein of adenovirus serotype 16.